WEST Search History

DATE: Friday, May 24, 2002

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L12	6379301.pn.	1	L12
L11	L10 and (device or apparatus or system or monitor)	51	L11
L10	L9 and (time or interval or level or concentration)	52	L10
L9	L8 and ((determine or determination or calculate or calculation) adj4 glucose)	52	L9
L8	carbohydrate and L7	346	L8
L7	(insulin adj dose) or ((dose or dosage) adj3 insulin)	1347	L7
DB=USPT; PLUR=YES; OP=OR			
L6	5400794.pn.	1	L6
L5	5400794.pn.	1	L5
L4	4935875.pn.	1	L4
L3	4890621.pn.	1	L3
L2	4637403.pn.	1	L2
L1	5507288.pn.	1	L1

END OF SEARCH HISTORY

DIALOG BIOTECH cluster

Set	Items	Descripti
S1	3	AU=KALATZ, B?
S2	13	AU=HOSS, U?
S3	13	S1 OR S2
S4	11	RD (unique items)
S5	171488	GLUCOSE AND CONCENTRATION
S6	2839	S5 AND MONITOR? AND DETERMIN?
S7	121	S6 AND INSULIN AND CARBOHYDRATE
S8	56	S7 AND (DEVICE OR APPARATUS OR COMPUTER OR SYSTEM)
S9	11	S8 AND (TIME(W4)(INTERVAL OR BETWEEN))
S10	11	RD (unique items)
S11	34	S8 AND TIME AND (TAKE? OR ADMINISTER? OR DOSE)
S12	0	S11 AND ((MONITOR(W)GLUCOSE) OR (MONITOR(W3)CONCENTRATION))
S13	232	S11 OR MONITOR(W)GLUCOSE
S14	0	S11 AND MONITOR(W)GLUCOSE
S15	198	S13 AND ((MONITOR(W)GLUCOSE) OR (MONITOR(W3)CONCENTRATION))
S16	54	S13 AND (TAKE? OR ADMINISTER OR DOSE)
S17	33	S16 AND S11
S18	33	RD (unique items)
S19	976578	DIABET?
S20	201619	S19 AND (DEVICE OR APPARATUS OR COMPUTER OR SYSTEM)
S21	704	S19 AND MICRODIALYSIS
S22	2922	S20 AND GLUCOSE(W2)(MONITOR OR CONCENTRATION)
S23	3467	S20 AND GLUCOSE(W2)(MONITOR OR CONCENTRATION OR DETERMIN?)
S24	139	S23 AND INSULIN AND CARBOHYDRATE AND (EFFECT OR RESPONSE OR LEVEL)
S25	22	S24 AND (FORMULA OR EQUATION OR CALCULAT?)
S26	22	RD (unique items)

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?s au=kalatz, b?
      S1        3  AU=KALATZ, B?
?s au=hoss, u?
      S2       13  AU=HOSS, U?
?s s1 or s2
                3  S1
               13  S2
      S3       13  S1 OR S2
?rd
...completed examining records
      S4       11  RD (unique items)
?t s4/au,ti,so,ab/1-11
>>>Some display codes not found in file 65: AB
>>>Some display codes not found in file 135: AB
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4/AU,TI,SO,AB/1 (Item 1 from file: 8)
DIALOG(R)File 8:(c) 2002 Engineering Info. Inc. All rts. reserv.

Title: Electrokinetic properties of aqueous suspensions of rodlike fd virus particles in the gas- and liquidlike phase
Author: **Hoss, Udo** ; Batzill, Stefan; Deggelmann, Martin; Graf, Christian ; Hagenbuchle, Martin; Johner, Christian; Hansgerd, Kramer; Martin, Cristoph; Overbeck, Ekkehard; Weber, Reinhart
Source: Macromolecules v 27 n 12 Jun 6 1994. p 3429-3431
Publication Year: 1994
Abstract: Recently we have investigated the electrokinetic properties of aqueous suspensions of tobacco mosaic viruses. It turned out that the electrophoretic mobility in the salt-free case decreases steadily with increasing particle concentration. When salt is added at a fixed particle concentration, the mobility changes smoothly without a relative maximum as has been observed for aqueous suspensions of latex spheres. In order to find out whether our recent observations are typical for rodlike systems, we have extended measurements to suspensions of fd virus particles. This virus has a length of 880 nm and a diameter of 9 nm; it is only slightly flexible. 17 Refs.

4/AU,TI,SO,AB/2 (Item 1 from file: 65)
DIALOG(R)File 65:(c) 2002 BLDSC all rts. reserv. All rts. reserv.

Mild hypoglycemia in type I diabetic patients undergoing intensified insulin therapy: When, how long and how often?
Sternberg, F.; Salgado, M. I.; **Hoss, U.** ; Rinne, H.
CONFERENCE: German Society of Endocrinology
EXPERIMENTAL AND CLINICAL ENDOCRINOLOGY AND DIABETES, 1997; VOL 105; NUMBER SUP/1 P: 61
Huthig, 1997
CONFERENCE EDITOR(S): Fehm, H. L.

4/AU,TI,SO,AB/3 (Item 2 from file: 65)
DIALOG(R)File 65:(c) 2002 BLDSC all rts. reserv. All rts. reserv.

Static light scattering by aqueous, salt-free solutions of charged polystyrenesulfonate at different molecular weights
Johner, C.; Graf, C.; **Hoss, U.** ; Kramer, H.
CONFERENCE: Trends in colloid and interface science VIII
PROGRESS IN COLLOID AND POLYMER SCIENCE, 1994; VOL 97 P: 35-39
Steinkopff, Springer, 1994
CONFERENCE EDITOR(S): Ottewill, R. H.; Rennie, A. R.

4/AU,TI,SO,AB/4 (Item 3 from file: 65)
DIALOG(R)File 65:(c) 2002 BLDSC all rts. reserv. All rts. reserv.

Calibration Problems of Subcutaneous Glucosensors when Applied " In Situ" in Man
Sternberg, F.; Meyerhoff, C.; Mennel, F. J.; **Hoss, U.**
CONFERENCE: Biosensors and microsystems in medicine and diabetology-

progress in insulin rapy
HORMONE AND METABOLIC RESEARCH, 1994; VOL 26; NUMBER 11 P: 523-525
Georg Thieme, 1994

4/AU,TI,SO,AB/5 (Item 1 from file: 399)
DIALOG(R)File 399:(c) 2002 AMERICAN CHEMICAL SOCIETY. All rts. reserv.

A novel method for continuous online glucose monitoring in humans: the comparative microdialysis technique
AUTHOR(S): Hoss, Udo; Kalatz, Brit; Gessler, Ralf; Pfleiderer, Hans-Jorg; Andreis, Elisabeth; Rutschmann, Malte; Rinne, Helmut; Schoemaker, Michael; Haug, Cornelia; Fussgaenger, Rolf D.
JOURNAL: Diabetes Technol. Ther. DATE: 2001 VOLUME: 3 NUMBER: 2
PAGES: 237-243

4/AU,TI,SO,AB/6 (Item 2 from file: 399)
DIALOG(R)File 399:(c) 2002 AMERICAN CHEMICAL SOCIETY. All rts. reserv.

Recent advances in continuous glucose monitoring
AUTHOR(S): Freckmann, G.; Kalatz, B.; Pfeiffer, B.; Hoss, U.; Haug, C.
JOURNAL: Exp. Clin. Endocrinol. Diabetes DATE: 2001 VOLUME: 109
NUMBER: Suppl. 2 PAGES: S347-S357

4/AU,TI,SO,AB/7 (Item 3 from file: 399)
DIALOG(R)File 399:(c) 2002 AMERICAN CHEMICAL SOCIETY. All rts. reserv.

System for the extrapolation of glucose concentration for determining insulin dosage
INVENTOR(AUTHOR): Kalatz, Brit; Hoss, Udo
PATENT: Germany Offen. ; DE 10057215 A1 DATE: 20010523
APPLICATION: DE 10057215 (20001117) *DE 19955734 (19991118)
PAGES: 14 pp.

4/AU,TI,SO,AB/8 (Item 4 from file: 399)
DIALOG(R)File 399:(c) 2002 AMERICAN CHEMICAL SOCIETY. All rts. reserv.

Glucose concentration determination in tissue with implantable microdialysis probe
INVENTOR(AUTHOR): Pfeiffer, Ernst F.; Hoss, Udo
PATENT: Germany Offen. ; DE 19618597 A1 DATE: 19971120
APPLICATION: DE 19618597 (19960509)
PAGES: 6 pp.

4/AU,TI,SO,AB/9 (Item 5 from file: 399)
DIALOG(R)File 399:(c) 2002 AMERICAN CHEMICAL SOCIETY. All rts. reserv.

Process and setup to determine the concentration of a metabolite in biological tissue
INVENTOR(AUTHOR): Pfeiffer, Ernst F.; Hoss, Udo
PATENT: Germany Offen. ; DE 19612105 A1 DATE: 19971002
APPLICATION: DE 19612105 (19960327)
PAGES: 6 pp.

4/AU,TI,SO,AB/10 (Item 6 from file: 399)
DIALOG(R)File 399:(c) 2002 AMERICAN CHEMICAL SOCIETY. All rts. reserv.

Static light scattering by aqueous, salt-free solutions of charged poly(styrenesulfonate) at different molecular weights
AUTHOR(S): Johner, C.; Graf, C.; Hoss, U.; Kramer, H.; Overbeck, E.; Weber, R.
JOURNAL: Prog. Colloid Polym. Sci. DATE: 1994 VOLUME: 97 NUMBER: Trends in Colloid and Interface Science VIII PAGES: 35-9

Electrokinetic properties of aqueous suspensions of interacting rodlike tobacco mosaic viruses in the gas- and liquidlike phase

AUTHOR(S): Deggelmann, Martin; Graf, Christian; Hagenbuechle, Martin; Hoss, Udo; Johner, Christian; Kramer, Hansgerd; Martin, Christoph; Weber, Reinhart

JOURNAL: J. Phys. Chem. DATE: 1994 VOLUME: 98 NUMBER: 1 PAGES: 364-8

26/AU,TI,SO,AB/1 (Item 1 from file: 34)
DIALOG(R)File 34:(c) 2002 Inst for Sci Info. All rts. reserv.

Title: BLOOD-GLUCOSE RISE FOLLOWING PRENATAL VITAMINS IN GESTATIONAL DIABETES
Author(s): SPARKS SP; JOVANOVICPETERSON L; PETERSON CM
Journal: JOURNAL OF THE AMERICAN COLLEGE OF NUTRITION, 1993, V12, N5 (OCT), P543-546
Abstract: Optimal outcome of gestational **diabetes** mellitus (GDM) is directly related to glucose control of the mother. If prenatal vitamins cause a large glycemic excursion, then the best prenatal vitamin would be one that produces the lowest blood glucose. Nine GDM women participated in two, 8-day test periods. Each subject ingested one of six prenatal vitamin-mineral preparations, a placebo, or a sucrose capsule, in random order. Blood **glucose** was **determined** by the One Touch **System** (R) at 0, 30, and 60 minutes. The sucrose capsule contained 1 g sucrose (equivalent to highest glucose/ **carbohydrate** content of any prenatal vitamin). The placebo contained 1 g table salt in the same color capsule. Relative glycemic index (RGI, defined as the area under glucose curve for the test substance divided by the area under glucose curve for 1 g sucrose) and maximum rise of blood glucose above time 0 were **calculated** for each preparation. RGI was significantly elevated for all vitamins: TRN 3.86, Natalins Rx 3.00, Filibon Forte 2.16, Prenatal **Formula** 2.10, Materna 1.66, Placebo 1.33, Stuartnatal 1 + 1 1.16. Two thousand mg vitamin C (n=4) resulted in an RGI of 1.37. In conclusion, ingestion of prenatal vitamins produces a rise in blood glucose greater than that seen following ingestion of sucrose equal to the **carbohydrate** content of prenatal vitamins. The cause of the blood glucose rise is not known, but it would appear prudent to prescribe a prenatal vitamin with a low RGI.

26/AU,TI,SO,AB/2 (Item 1 from file: 73)
DIALOG(R)File 73:(c) 2002 Elsevier Science B.V. All rts. reserv.

Effect of dietary fibre on blood glucose, plasma immunoreactive insulin , C-peptide and GIP responses in non insulin **dependent (type 2) diabetics and controls**
Hagander B.; Schersten B.; Asp N.G.; et al.
Acta Medica Scandinavica (ACTA MED. SCAND.) 1984, 215/3 (205-213)

A high fibre and a low fibre breakfast meal were given to eight non **insulin** dependent **diabetics** (NIDD), and eight controls. Blood glucose **response** was monitored continuously for three hours and characterized using a straight line model. After the high fibre meal the rates of increase and decrease in blood **glucose concentration** were slower both in **diabetics** and controls than after the low fibre meal. The delay time, however, i.e., the time from meal intake to the start of glucose increase, hypothetically corresponding to gastric emptying time, was the same after both test meals. The postprandial glucose increment **calculated** as the area under the 0-120 min curve was lower after the high fibre meal in the NIDD, but not in the controls. The two-hour C-peptide and gastric inhibitory polypeptide values were lower for the **diabetics** after the high fibre breakfast. The results indicate a prolonged **carbohydrate** digestion and/or absorption after high fibre breakfast.
1984

26/AU,TI,SO,AB/3 (Item 2 from file: 73)
DIALOG(R)File 73:(c) 2002 Elsevier Science B.V. All rts. reserv.

Effect of digestible carbohydrates on glucose control in insulin **-dependent** diabetic **patients**
Perrotti N.; Santoro D.; Genovese S.; et al.
Diabetes Care (DIABETES CARE) 1984, 7/4 (354-359)

Recent studies have demonstrated that high- **carbohydrate** -high-fiber diets may improve the metabolic control in **diabetes** . To evaluate the influence of dietary carbohydrates separate from dietary fiber on blood

glucose control, six **insulin** -dependent **diabetic** patients (IDD) were assigned in random order to two weight-maintaining diets for consecutive periods of 10 days. The diets differed in **carbohydrate** (41% in diet A and 50% in diet B) and fat content (41% and 20%, respectively) but were identical in calories, proteins, simple sugars, and fiber. After each dietary period blood glucose was continuously monitored for 24 h (Biostator GCIIS, Life Science Instruments, Miles Laboratories, Elkhart, Indiana). The M value was 48 +/- 20 after diet A and 96 +/- 27 after diet B ($t = 3.83$, $P < 0.025$); the mean daily blood glucose was 152 +/- 5 mg/dl after diet A and 206 +/- 11 mg/dl after diet B ($t = 7.50$, $P < 0.001$). Similarly, the blood glucose **level** for the 3-h period after each of the three main meals was lower after diet A than after diet B (analysis of variance: $F = 5.2$, $P < 0.05$). No significant difference in fasting serum cholesterol, triglycerides, or serum lipoprotein composition was observed between the two diets. In order to separate the influence of dietary **carbohydrate** and fat on postprandial blood **glucose concentration** , an additional test meal experiment was performed in eight **insulin** -dependent **diabetic** patients. In random order on consecutive days they were given two standard meals that were identical in **carbohydrate** and protein content and differed only in the amount of olive oil added to the meals (12 g versus 36 g). The average blood glucose increments **calculated** for the 3 h after the meal were almost identical after the high-fat and the low-fat test meal. It is concluded that increasing the amount of dietary **carbohydrate** leads to the deterioration of blood glucose control in IDD patients.

1984

26/AU,TI,SO,AB/4 (Item 3 from file: 73)

Effects of therapy on the nature and quantity of fuels oxidized during diabetic **ketoacidosis**
Owen O.E.; Trapp V.E.; Reichard Jr. G.A.; et al.
Diabetes (DIABETES) 1980, 29/5 (365-372)

We studied seven patients, in moderate to severe **diabetic** ketoacidosis (DKA), measuring respiratory exchanges of Oinf 2, COinf 2, and acetone and urinary excretion of nitrogen, ketone bodies, and glucose to **calculate** the respiratory quotient (RQ), nonprotein respiratory quotient (npRQ), metabolic requirements, and calories derived from fat, **carbohydrate** , and protein oxidation. Results from indirect calorimetry were related to circulating concentrations of glucose, free fatty acids, ketone bodies, and amino acids over a 14-h study consisting of a 2-h period I of rehydration with saline, a 4-h period II of rehydration and **insulin** therapy, and an 8-h period III of rehydration, **insulin** , and glucose administration. During period I, of about 2 h of saline rehydration, the RQ (0.55 - 0.80) and npRQ (0.58 - 0.88) varied among the patients but in general was low. The caloric requirements were 1.24 kcal/min/1.73 msup 2. Initially, fat contributed 78 +/- 11%, glucose 17 +/- 10%, and protein 5 +/- 2% of the metabolic requirements. The circulating concentrations of fuels remained constant. During period II, after about 4 h of saline and **insulin** therapy, the RQ (0.62 - 0.88) and npRQ (0.55 - 0.91) remained rather stable, rising in only two of seven patients. Nevertheless, in all patients, saline and **insulin** therapy was associated with precipitous decreases in circulating concentrations of glucose, free fatty acids, acetoacetate, and beta-hydroxybutyrate and gradual decreases in plasma amino acids. During period III, after 8-12 h of **insulin** therapy, the RQ (0.68 - 0.92) and npRQ (0.48 - 1.01) increased, rising in five of six patients. Heightened RQ and npRQ values were observed only after plasma free fatty acid concentrations decreased to 0.44 +/- 0.12 mM and plasma acetoacetate plus beta-hydroxybutyrate concentrations decreased to 5.27 +/- 1.86 mM, while plasma **glucose concentration** remained elevated at 13.49 +/- 3.67 mM because of intravenous glucose infusion. Caloric requirements diminished progressively throughout the study, and after about 4 h of saline and **insulin** therapy a reciprocal relationship between the contributions of fat and glucose to metabolic requirements was evident. At the end of period III the caloric requirements were 0.77 kcal/min/1.73 msup 2. Fat contributed 44 +/- 16%, glucose 42 +/- 22%, and protein 14 +/- 8% of

the metabolic requirements. We have observed a dissociation between the decrease in plasma glucose, free fatty acids, ketone bodies, and amino acids and the nature of fuels oxidized. This suggests that, during the initial hours of therapy for DKA, the predominant **effect** of **insulin** is to promote fuel storage rather than to promote glucose and ketone body oxidation. It was 8-12 h in the course of therapy before the npRQ rose, reflecting heightened glucose oxidation and diminished fat oxidation. Metabolic requirements progressively decreased with therapy.

1980

26/AU,TI,SO,AB/5 (Item 1 from file: 94)

Topics of recent enzyme engineering. Development of blood glucose sensors of enzymatic activity control type.

MIYASAKA TAKEHIRO (1); SAKAI KIYOTAKA (1)
(1) Waseda Univ., Sch. of Sci. & Eng.

Kemikaru Enjiniyaringu(Chemical Engineering (Tokyo), 1997, VOL.42,NO.5, PAGE.356-359, FIG.10, REF.9

ABSTRACT: An artificial endocrine pancreas of bed-side type had been developed for the measurement of the chronic complication with eye, nerve, kidney damage by **diabetes** mellitus. The artificial kidney is able to measure continuously the blood **glucose concentration** , and to **calculate** and aminister the **insulin** requirements to control the blood glucose **level** from the data. This artificial endocrine pancreas has been composed of three kinds of devices such as the glucose sensor for the continuous measurement of **glucose concentration** , and the controller and pump for the **insulin** infusion. This paper introduces the development of the glucose sensor which is able to stabilize measurement for long time in the condition of the subcutaneous implantation. This kind of sensor part is necessary for the manufacture of the portable artificial wearable artificial endocrine pancreas.